

ABSTRACT

An object of the invention is to significantly reduce generation of polishing flaws in a surface of a semiconductor device without affecting an advantage of fumed silica, i.e., a high polishing speed even when fumed silica is contained as a polishing agent. A semiconductor wafer (3) is placed on a pad (2) stuck to a polishing bed (1), and with a pressure head (4) pressed against the semiconductor wafer (3) and with a polishing composition (5) supplying on a surface of the pad (2), the pad (2) and the pressure head (4) are rotated to polish the wafer (3). At the time, as the polishing composition (5), it is possible to use a semiconductor polishing composition that is an aqueous dispersion solution of fumed silica and where the number of fumed silica particles having a particle diameter of 0.5 μm or more is 600,000 pieces/ml or less and the number of fumed silica particles having a particle diameter of 1 μm or more is 4000 pieces/ml or less.